UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,308	12/15/1999	TAIZO AKIMOTO	Q56519	3646

7590 01/22/2004

DARRYL MEXIC
SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER	
LU, FRANK WEI MIN	
ART UNIT	PAPER NUMBER
1634	

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/461,308	AKIMOTO, TAIZO	
	Examiner	Art Unit	
	Frank W Lu	1655	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 October 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on *20 December 2001*. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *see attached action*.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: *28,32 and 36*.

   Claim(s) rejected: *25-27, 29-31, and 33-35*.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

ADVISORY ACTION

1. The proposed amendments filed on October 22, 2003 have been fully considered but will not be entered because they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.

Response to Arguments

In page 5, third paragraph bridging to page 6, second paragraph of applicant's remarks, applicant argues that "[A]pplicants assert that the apparatus of claim 25 is both structurally and functionally distinct from that taught by Chee." since "1) In Chee, the first and second labeling substances are bound to separate samples that do not hybridize to each other, but hybridize separately to a third, unlabeled member (see Chee column 25, lines 4-6). In the instant application, the first and second labeling substances are bound to separate samples that bind, i.e. hybridize, to each other, and there is no third unlabeled member. Therefore, the instant invention and that taught by Chee are structurally distinct. (2) In Chee, two separate samples are labeled, combined, and hybridized to a third member or probe. Chee thereby allows the experimenter to reduce variations between two samples since the samples underwent identical processing steps (see Chee column 24, lines 38-41). However, in the present application, the first labeled sample is disposed on a test piece, i.e. chip, and the second labeled sample is bound, i.e. hybridized, to the first labeled sample. The experimenter can therefore correct the signal from the second labeled sample at each position based on the amount of the first labeled sample disposed at that position. Therefore, the detection means of the instant invention do not allow correction between different experimental samples, as in Chee, but allow for correction within a single experimental sample.

Therefore, the detection means of the instant application and those taught by Chee are functionally distinct. (3) In Chee, the analyzing means does not correct the level of the second signal based on the level of the first signal, as in the present invention. The analyzing means in Chee merely plots the level of the two signals on a graph, separately, and for each position on the chip. Where signals are the same, the lines will overlap; where the signals are different, they won't (see Chee, Figure 14A). Since Chee does not teach correcting the level of one signal based on the level of another signal, the analyzing means of the instant invention must be both structurally and functionally distinct from the analyzing means taught by Chee.".

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. First, according to MPEP 2182, "[T]he 'means or step plus function' limitation should be interpreted in a manner consistent with the specification disclosure. If the specification defines what is meant by the limitation for the purposes of the claimed invention, the examiner should interpret the limitation as having that meaning. If no definition is provided, some judgment must be exercised in determining the scope of the limitation.". Since the specification does not specially define a first detection means and a second detection means, both specification (see page 18, last paragraph bridging to page 19, first paragraph) and Chee teach two different fluorescence dyes (see column 24, last paragraph), two different fluorescence dyes taught Chee are a first detection means and a second detection means as recited in claim 25. Therefore, the detection means of the instant application and those taught by Chee are not functionally distinct. Second, since claim 25 is a "means plus function" type of claim and the specification of this instant application and the patent taught by Chee have the same means that is directed to the same

function, the detection means of the instant application and those taught by Chee are not functionally distinct. Third, since the specification does not specially define an analyzing means, both specification (see page 20, last paragraph) and Chee teach scanning means (see column 6, first paragraph), scanning system taught Chee is an analyzing means as recited in claim 25. Since claim 25 is a "means plus function" type of claim and the specification of this instant application and the patent taught by Chee have the same means that is directed to the same function, the analyzing means of the instant application and the analyzing means taught by Chee are not structurally and functionally distinct.

2. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270 (before January 13, 2004) or 571-272-0746 (after January 13, 2004). The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703) 308-1119.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

Frank Lu
PSA
January 12, 2004

RJ FORMAN, PH.D.
PRIMARY EXAMINER